

Evidence-based approaches to school improvement: The Kimberley Schools Project



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Abstract

Despite a great deal of goodwill, effort and funding, student achievement in the Kimberley region of Western Australia has shown little improvement in the last decade.

Governments have intervened in a range of ways: tying funding to evidence that schools are closing the gap; improving conditions for teachers and principals working with remote communities; funding a bewildering range of attendance and engagement strategies; and supporting cultural relevance through a range of short-term skill and enrichment programs.

This paper describes the Kimberley Schools Project, which is an alternative approach funded by the Western Australian Government through the Royalties for Regions program. It is a 'low variation' approach that asks volunteer schools to sign on to four common strands of activity: targeted teaching; early years learning and care; attendance and engagement; and connecting community, school and learning.

The Project offers coaching and support to teachers and school principals in implementing these four strands.

It's too soon to tell whether this program will succeed where others have failed, but this paper documents the evidence behind the approach that has been taken and share some early insights about implementation.

Introduction

School improvement in the Kimberley region of Western Australia is what social planners call a ‘wicked problem’: multiple dependencies between education and health, housing and employment; conflicting views about solutions; and a history of inconclusive attempts at improvement.

The Kimberley region includes some of the most disadvantaged communities in Australia. Compared with the rest of Western Australia, Kimberley children are more than twice as likely to have a low birth weight, three times as likely to be born to teenage mothers, four times as likely to be hospitalised for potentially preventable conditions, and hundreds of times more likely to be affected by Fetal Alcohol Spectrum Disorder (Serafino & Anderson, 2015). More than 45 per cent of young Kimberley children are classified as developmentally vulnerable on at least one indicator and about 30 per cent as vulnerable on two indicators (Western Australia, Department of Education, 2018, p. 10).

Attendance rates and achievement lag well behind the rest of the country and are either static or deteriorating. The attendance rate of Aboriginal children in the Kimberley region was 71 per cent in 2010 and 67 per cent in 2016 (Kimberley Regional Education Office, 2017). The proportion of Aboriginal children in the region who achieved the National Minimum Standard (NMS) in Year 3 NAPLAN reading fell from 62 per cent in 2010 to 60 per cent 2016. In that time, the proportion of WA students who achieved the NMS rose from 91.7 per cent to 93.8 per cent (ACARA, 2010, 2016). For the children in very remote schools – and about half of the 41 schools in the region are classified as very remote – outcomes were much worse. Fewer than 22 per cent of children in very remote Western Australian schools reached the NMS in Year 3 reading in 2017 (ACARA, 2017).

Problems and solutions

Many initiatives have attempted to unpick this ‘wicked problem’. Some have seen the locus of the problem in language and dialect, leading to projects focused on two-way learning that is more respectful and makes more use of children’s home languages and dialects (Western Australia, Department of Education, 2012). Others, such as the Stronger Smarter Institute, have focused on building safer, more respectful school environments and replacing a culture of low expectations (Stronger Smarter Institute, 2017). Many improvement efforts have focused on curriculum issues, ranging from play based and personalised learning (Association of Independent Schools of Western Australia, 2017) to direct instruction (Australian Government, Department of Education and Training, 2017). There have been significant attempts to reduce principal and teacher

transiency, through substantial improvements in salaries and conditions in remote schools (Western Australia, Department of Education, 2018). And beyond traditional school subjects, there have been all sorts of cultural offerings focused on improving the engagement of school-aged children, such as week-long hip hop video-making programs (Indigenous Hip Hop Projects, 2014).

This range of well-meaning (and expensive) activity has no doubt had some positive local impact but has not touched the attendance and achievement norms of the region. It may be that this reflects the context of schooling in the Kimberley, rather than the quality of the initiatives. The climate is harsh, communities are small and there are great distances between schools. The Kimberley’s schools serve a land area twice the size of Victoria and a total population of fewer than 35 000 people. High levels of intergenerational disadvantage and disengagement from schooling mean that student transience and low levels of attendance are likely to persist. Many schools will continue to be very small and very remote, with fewer than five teachers. Many teachers and school leaders are likely to be inexperienced in their roles and unfamiliar with life in remote communities and – notwithstanding significant improvements in teacher salaries and conditions – many teachers and school leaders are likely to move on after a few years in remote communities.

If it is these contextual constraints, rather than the quality of individual improvement initiatives, that have limited improvement in the Kimberley then it makes sense to design school improvements that can persist within these constraints – in small and remote places with high transience and turnover among students, teachers and school leaders. That is what we have set out to do in the Kimberley Schools Project.

The Kimberley Schools Project

The Kimberley Schools Project (KSP) was established on the initiative of the Kimberley Development Commission, the statutory authority responsible for the social and economic development of the region. It has access to funds not directly available to schools or school systems and has made an additional investment of \$25 million over three years (Western Australia, Regional Services Reform Unit, 2018). The KSP is cross-sectoral activity, available to all Kimberley schools and sectors on an opt-in basis.

Four fundamental principles underpin thinking about the project: impact, evidence, local leadership and persistence.

- Impact: preferring initiatives likely to have a direct and measureable effect on academic achievement, especially in literacy and numeracy.

- Evidence: preferring initiatives for which there is substantial external evidence of the likelihood of success.
- Local leadership: preferring staff with long-term local experience and cultural competence.
- Persistence: preferring initiatives likely to persist in small and remote communities when transient staff have moved on.

With these principles in mind, four strands of activity have been identified: targeted teaching; early years learning and care; attendance and engagement; and connecting community, school and learning. In each case, an evidence review was commissioned to guide project planning.

Targeted teaching

The first strand of activity is underpinned by an evidence review prepared by a team from Edith Cowan University. This review included advice on teaching strategies, target-setting and assessment, and coaching for teachers and school leaders (Konza et al., 2016). Responding to the high levels of student and teacher transiency and high levels of student absence that characterise many Kimberley schools, a common pedagogical framework was proposed for all schools opting in to the KSP. This lower-variation approach to teaching reflects the kind of thinking summarised in Rosenshine's (2012) research-based principles of instruction (see Table 1).

What we are calling 'targeted teaching' includes several strands:

- *Let's decode*, a systematic synthetics phonic program (Formentin, 1993; Scarparolo & Hammond, 2017)
- explicit whole-class initial teaching

- direct instruction through programs such as *Junior elementary math mastery* (Farkota, 2010) for students who require additional support.

Schools who join the program receive training in these approaches, as well as school-based coaching and feedback provided by experienced coaches who are located in the Kimberley and able to visit each far-flung school twice a term. Student achievement is closely tracked using a range of summative and formative assessments. All assessment data are entered by teachers or coaches into a common digital database designed to track student growth over time. The database also includes a range of student demographic and attendance data drawn down from school system databases, and is available as an iPad app for easy classroom use.

School leaders are directly involved in the teacher professional development and coaching program and are supported by a leadership program that helps them target activities and monitor achievement, attendance and implementation fidelity data across each school year.

Early years learning and care

The second strand of activity, early years learning and care, builds on an evidence review prepared by a team at the Telethon Kids Institute (Morton & Ansell, 2018). This report analysed targeted government funding for pre-kindergarten services, concluding that 29 of the 41 Kimberley schools do not have access to pre-kindergarten programs and that almost all of these are in very remote Aboriginal communities. In many of these communities, the school is the only organisation with adequate infrastructure to respond to 0–3 year-old health, development and education needs. Based on a literature review and consultation with schools, the report identifies ten critical success factors

Table 1 Rosenshine's principles of instruction

Begin lessons with a short review
Present new material in small steps with student practice after each step
Ask many questions and check responses of all students
Provide models
Guide student practice
Check for student understanding
Obtain a high success rate
Provide scaffolds for difficult tasks
Require and monitor independent practice
Engage student in weekly and monthly review

Table 2 Early years key success factors, Kimberley 2018

The parent/carer being present and involved throughout the program
Adaptation of the program and activities for the local Aboriginal community, culture and language, as well as Aboriginal community control, involvement or management
Tailoring the program and activities to each child's needs, focusing on each child's development as well as balancing activities that are fun with being developmentally focused and meeting parent/carer needs
Staffing attributes such as Aboriginality, cultural safety and relationship building
Linking with schools, focusing on school readiness and providing a gateway to school entry
Linking to health services and access to other early years/family services through the program
The ability of the program to facilitate out-of-class or in-home activities and work
A focus on planning, monitoring and review of the program and activities
A focus on infrastructure enhancement and resources
Adequate access and transport

for pre-kindergarten programs in Kimberley schools and two currently available programs that meet all of the success factors: Families as First Educators¹ and the Abecedarian Approach Australia² (see Table 2, p. 11).

Considering these success factors and the current funding streams through state and Commonwealth health and education portfolios, the KSP project team will work individually with schools to develop and augment existing place-based services in each community. In many cases, the simplest strategy will be to implement the Abecedarian or Families as First Educators approaches.

Attendance and engagement

The third strand of activity is underpinned by another evidence review commissioned from a different Telethon Kids Institute team (Wyndow, Hancock, & Zubrick, 2017). The report reviewed attendance data in Kimberley schools for 2008–2016, identified barriers to school attendance, conducted an audit of existing programs in schools and explored the evidence base supporting attendance and engagement strategies.

Although the research showed that there was a modest positive relationship between school socio-educational status, size and attendance, there were many instances of the contrary: very disadvantaged schools with good attendance, small schools with good attendance and schools with considerable fluctuation in attendance over time. Figure 1 shows the relationship between the Index of Socio-Educational Advantage (ICSEA) and average school attendance, with school

size represented by the size of the marker and school sector represented by the colour of the mark.

Eighty-five *different* attendance programs or strategies were identified in Kimberley schools. On average, each school was implementing strategies in six or seven domains at the time of the study. Table 3 (p. 12) identifies the key domains, the number of programs in each domain and some examples of individual programs.

Given the range of activity identified in this review, the project team will be working with schools with a place-based strategy, to identify the most effective of the attendance programs they currently use and to explore opportunities to learn from other similar schools and communities.

Connecting community, school and learning

The evidence review on the fourth strand of the project was undertaken within the project, with key project staff consulting with Kimberley-based colleagues about success factors in connecting communities and schools. Six key success factors were identified (see Table 4, p. 13).

In small and remote communities in the Kimberley, it is evident to all that educational success depends on strong relationships between communities and schools. Most schools put a lot of effort into these relationships. Success varies, among communities and over time, and depends less on strategies and more on relationships. In this strand of the KSP, project staff will work with school leaders and community members on place-based strategies to strengthen these relationships.

¹ <https://apps.aifs.gov.au/ipppregister/projects/families-as-first-teachers-nt-fa-it-indigenous-parenting-support-services-program>

² <https://3a.education.unimelb.edu.au/>

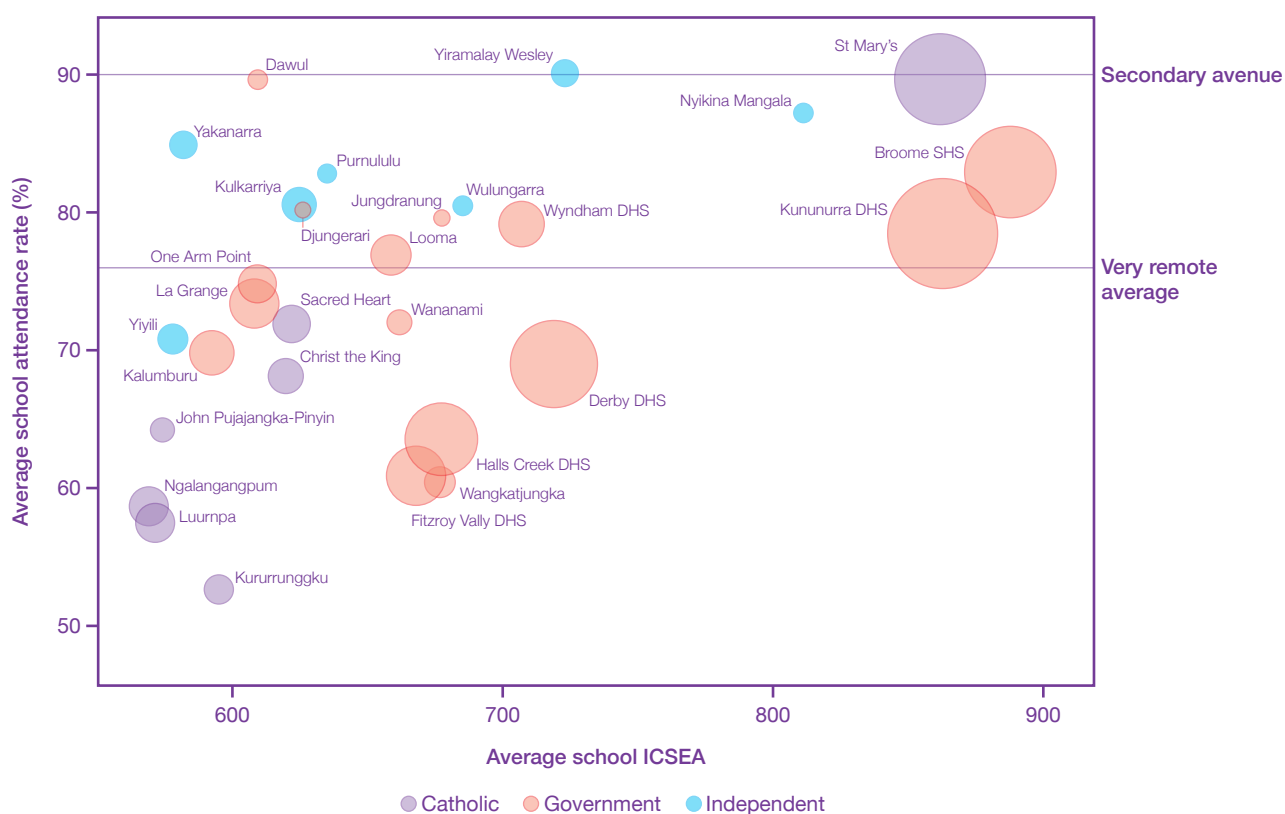


Figure 1 Attendance and engagement in Kimberley schools, average school attendance, by average ICSEA of school

Table 3 Attendance and engagement programs and strategies identified in the review, 2017

Domains	Programs (no.)	Examples
Whole of school approach	7	Remote School Attendance Program, Formal attendance policy
Attendance monitoring	9	Daily phone calls/runs, School Based Attendance Officers
External engagement	16	Bush Rangers, Clontarf Academy, Deadly Sista Girlz
Prizes and Incentives	8	Prizes, end of year awards, family awards
Food and nutrition	6	Foodbank, Eon Food and Nutrition
Numeracy and literacy	27	Aboriginal Literacy Strategy, Books in Homes, First Steps, Principals as Literacy Leaders
Sports and culture	12	Art, sports (e.g. football, netball), dance, music
Early childhood programs	5	Kindilink, Aboriginal Families as First Educators

Table 4 Connecting schools and communities key success factors, Kimberley 2017

A clear and agreed strategic purpose based on high expectations for Aboriginal students.
Whole-school approaches to building a positive school culture – all staff modelling agreed values, standards and behaviours.
Identifying and using cultural leaders and including them in school decision making.
Establishing clear statements of roles and responsibilities.
Authentic two-way dialogue and conversations supported through well designed processes.
Positive relationships among school, principals, parents, community, teachers and students that are fostered by celebrations, extra-curricular activities and opportunities for parental and community involvement.

Conclusion

The KSP has been three years in the planning, involving intricate negotiations between government agencies responsible for schooling and for regional development, between public and independent school systems and with individual schools and communities. The first group of 10 schools have satisfied the readiness requirements to participate in the project, have participated in several rounds of targeted teaching professional learning, have visited schools using similar methods, have had several rounds of in-school coaching, and have developed local plans to improve early years education and care, attendance and school-community collaboration.

So far, the project has been characterised by a great deal of energy and enthusiasm, and it is too soon for the first stories of disappointment or failure to emerge. There is a long way to go before the evidence-based approaches advocated in the project are institutionalised in these schools, and before we see whether these approaches persist when teachers and school leaders move on. Given the complexity of the context, it will be some years before we know whether the KSP has made a material difference to the outcomes for the vulnerable communities these schools serve, or whether the KSP will be one more exhibit in the museum of failed educational innovation. But that is a story for another day.

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